



# **ELECTRIC REVERSE**

**2004 - Current** 

**Harley-Davidson Sportster** 

**Installation Instructions** 

California Sidecar Parts & Technical Support 434.263.8866

#### **Warnings and considerations:**

- 1. Disclaimer These instructions assume a level of understanding of motorcycle repair and maintenance beyond that of a "beginner" and/or "novice" and California Sidecar cannot be liable for an installer's failure to understand or follow these instructions as written. Likewise, California Sidecar cannot be responsible if any of the steps are omitted or shortcuts are taken, or parts other than those supplied by California Sidecar, are used in installing this trike kit.
- 2. "WARNINGS" are all printed in bold type and capitalized.
  They mean to use extreme care in a given step so as not to damage the part, motorcycle, and/or yourself.
- 3. Always wear safety glasses when using hand and/or power tools.
- 4. When working in and around the fuel system, always work in a well-ventilated area, free from sparks and open flames.
- 5. All directional references to the "right side" and the "left side" are as you were seated on the motorcycle.
- 6. All directional references to "forward" mean to the front of the motorcycle while "back" means the rear of the motorcycle unless otherwise stated.
- 7. Please consult the appropriate Service Manual for your motorcycle if further detail is necessary.

# INSTALL REVERSE AND ALL ITS PARTS DURING INSTALLATION AND BEFORE THE BODY IS INSTALLED.

# **Assembly:**

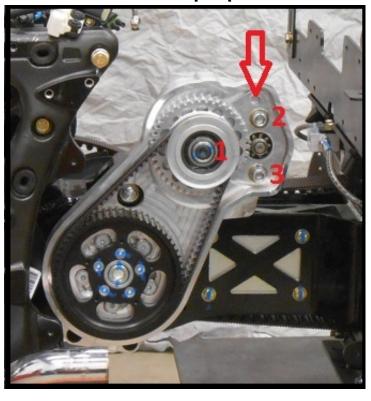
- 1. Once 28 MM and 50 MM belts are tensioned and all clamping bolts are tightened.
- 2. Check the Tension of the Reverse belt.
- 3. Sonic Tension Meter specs:

MASS 004.7 WIDTH 021.0 SPAN 0176

4. Reverse Belt Tension:

SINGLE SPAN TENSION: 49-55 lbs.

- 5. To tension belt you most loosen the 3 fasteners Red 1 3
- 6. Using a 3/8 drive breaker bar insert it in the square drive hole (Red Arrow), then retighten the 3 fasteners
- 7. Follow this proceeded until the proper tension is acquired



#### Wiring:

- 1. Secure Reverse module to the top of the Intermediate Mount
- 2. Disconnect the Negative battery terminal
- 3. Plug both harnesses into the Reverse module
- 4. Route the Blue and White wires to the Reverse motor
- 5. Plug in the Blue spade to the Reverse Motor
- 6. Route the rest of the wire harness up under the seat

RED - Key on Power

WHITE - Ground

**RED/YELLOW- Brake Light** 

GREEN - Engine Run, Fuel Pump

**BROWN** - Neutral

YELLOW - Horn Button

BLACK - Horn

**BLUE** - Reverse Motor Trigger

7. Route the Red & Red/Yellow wires to the fender plug

#### 2004 - 2013 Models:

- 8. Red wire to Orange/white, Accessory power
- 9. Red/Yellow wire to Red/Yellow, Brake Light
- 10. Green wire to Yellow/Green, Fuel Pump
- 11. BROWN wire to Tan, Neutral
- 12. Locate the Yellow/Black wire, Horn wire
- 13. Cut the wire connect the Yellow wire to the end going to the button
- 14. Connect the other end going to the Horn to the Black wire

## **2014 - Current Models:**

- 15. Red wire to Red/Yellow, Accessory power
- 16. Red/Yellow wire to Blue/Red, Brake Light

#### At the BCM:

- 17. Brown wire to pin D3 White, Neutral
- 18. Green wire to pin F4 Red/Brown, Fuel Pump
- 19. At pin E4, Horn wire, cut it
- 20. Black wire connects to the harness side
- 21. Yellow wire connects to the BCM

#### **ALL Models:**

- 22. Route the remaining end of the harness with a 3 pin connector up under the gas tank to the front end
- 23. We have supplied to different mounts for the Reverse Button.
- 24. Option One will go on the engine mount between the front and rear cylinders just above the horn
- 25. Option two is the smaller tab going on the lower pinch bolt for the clutch perch.
- 26. Ensure the rubber washer is on the Reverse button, then insert the wire thru the tab and install nut and tighten.
- 27. Connect the harness to the Reverse switch and secure wires with cable ties
- 28. Install terminal boot onto Red positive cable.
- 29. Connect the red positive cable to the stud on the Reverse motor solenoid.
- 30. Connect the Red cable to the battery positive
- 31. Connect the Blue wire to the male spade on the Reverse motor
- 32.Install the black negative cable and white wire to the lower long mounting bolt on the Reverse motor. Route the negative cable to the Battery and connect

33. Ensure that all wires and miscellaneous components are secured to the frame with cable ties.

## **Operating the Electric Reverse:**

- 1. With the Trike in neutral. Start the engine.
- 2. Depress the reverse switch and the Red LED will light up.
- 3. Press the Horn button and the trike will then back up.
- 4. If the brakes are applied the reverse will pause until the brakes are no longer being used.

From all of us at California Sidecar. Enjoy the ride!